SOCIETIES AND ACADEMIES.

BIOLOGICAL SOCIETY OF WASHINGTON, 263D MEETING, MAY 30, 1896.

THEO. GILL spoke of *The Characteristics of the Families Salmonidæ and Thymallidæ*, saying that in 1894 he had given definitions of the two based on modifications of the cranium, the presence or absence of epipleurals, and the development of the dorsal fin. The *Salmonidæ* were supposed to have the 'parietal bones separated at middle by the intervention of the supraoccipital,' while the *Thymallidæ* had 'parietal bones meeting at middle.' Mr. Boulenger has denied the existence or value of these differential characters. As to the relations of the parietal and supraoccipital bones he was fully justified. The Coregonines generally have the parietals contiguous, and therefore the distinction of the Salmonids from the Thymallids on that basis must be abandoned. But there appears to be no reason for further abandonment. The epipleurals are well developed in *Thymallus*, while none could be found in *Salmo*, *Salvelinus*, *Argyrosomus* and *Coregonus*. It was suggested that Mr. Boulenger might have considered the epicentrals, which are common to both the Salmonids and Thymallids, to be what was meant by epipleurals. At any rate, Prof. Evermann and Mr. Lucas had both reëxamined the question on specimens prepared by themselves and had reached the same conclusions as the speaker. There is no question about the difference between the dorsal fins of the two types. They may, therefore, be maintained as families differentiated by the combination of epipleurals and peculiar dorsal in the Thymallids and no epipleurals and normally constructed dorsal in the Salmonids.

Barton W. Evermann spoke of *The Fishes and Fisheries of Indian River, Florida.* Indian River is not a river at all, but a long, shallow salt-water lagoon shut off from the sea by a series of low and narrow islands.

The depth is usually not greater than 6 to 10 feet, and the density of the water varies from 1.013 to 1.019.

The total number of species of fishes now known from the river is 105, though further investigation will doubtless add many to the list.

Indian River is remarkable for the large number of important food fishes which it contains, no fewer than 25 species being handled by the fishermen. Among the most important may be named the following: Common mullet (*Mugil cephalus*), pompano (*Trachinotus carolinus*), bluefish (*Pomatomus saltatrix*), red drum (*Sciænops ocellatus*), spotted squeteague, or sea trout (*Cynoscion nebulosus*), and the mangrove snapper (*Neomænis griseus*). The mullet is by far the most abundant of the food fishes.

The fisheries of this river have developed along with the completion of the Florida East Coast Railroad, which now furnishes excellent facilities for the shipping of fish to Northern cities. At first Titusville was the only important fishing center, but now several points further south are equally important. The severe cold in the winter of 1894–95 caused a considerable increase in the number of fishing firms. Several growers of oranges and pineapples, finding their orchards ruined, have turned their attention, temporarily at least, to fishing. F. A. LUCAS, *Secretary.*

THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA, JUNE 9, 1896.

PAPERS under the following titles were presented for publication:

'Contributions to a Knowledge of the Hymenoptera of Brazil; No. 1, Scoliidæ,' by Wm. J. Fox.

'The Correct Position of the Aperature of Planorbis,' by Frank C. Baker.

'The Mesenteries of the Lacertilia,' by E. D. Cope.

'Revision of the Slugs of North America, Ariolimax and Aphallarion,' by Henry A. Pilsbry and E. G. Vanatta.

Dr. Harrison Allen made a communication on forms considered specific, but which were merely instances of arrested development. He referred in illustration to certain species of *Vespertilio*, claiming that *lucifugus* is merely an arrested form of *gryphus*, the species *albescens* also being based on similar characters. He had applied the term pædomorphism to the condition which had been worked out, he believed, only among the bats and by himself. He held that the specific names of such forms were not valid and should be dropped.

Dr. Horn stated that many such instances of arrested developments were found among insects. He referred to the dimorphic males of *Eupsalis minuta*, a rhyncophorous beetle, on which a French writer had founded three species. The egg-depositing habits of the female and the assistance occasionally rendered by the male were commented on.

Botanical Section, June 8, 1896. Dr. Chas. Schaeffer, Recorder. A paper was read from Mr. Thos. Meehan on *Erigeron strigosus*. A tendency of the ray florets to become discoidal, together with an acceleration from the lingulate to the discoid condition, was noted. The hermaphrodite state of the flower is not established until the tubular condition becomes permanent.

Dr. Ida A. Keller recorded the fact that if a cold alcoholic solution of chlorophyl be treated with benzol, the chlorophyl will be extracted and float as a green film on the surface of the liquid.

Records were made by Mr. Stevenson Brown, Mr. Crawford and Mr. Williamson, of unusual distribution of species.

EDW. J. NOLAN,
Recording Secretary.

MEETING OF THE NEW YORK SECTION OF THE AMERICAN CHEMICAL SOCIETY.

THE June meeting of the New York Section of the American Chemical Society was held on Friday evening, the 5th inst., at the College of the City of New York, Prof. A. A. Breneman presiding.

After the reading of the minutes the chairman of the Committee on Organization of the Chemical Club reported that at a recent meeting of the committee, held at the Board of Trade, much enthusiasm was shown, and the movement was making good progress.

A communication from the Joint Commission of the Scientific Societies of Washington in regard to the Senate bill 1552, intended to restrict, if not prohibit, vivisection, was taken up and acted upon.

The sentiment of the meeting was unanimous in the direction of preventing affirmative action by Congress on the said bill; and the following resolutions were unanimously adopted, after a full discussion, in which Profs. Sabin, Breneman, Doremus, Hale and McMurtrie participated.

Resolved, That the New York Section of the American Chemical Society most earnestly opposes the legislation proposed by Senate bill 1552, entitled 'A bill for the further prevention of Cruelty to animals in the District of Columbia.'

Resolved, That the proposed legislation is unnecessary and would seriously interfere with the advancement of biological science in that District; that it would be especially harmful in its restriction of experiments relating to the cause, prevention and cure of the infectious diseases of man and of the lower animals; that the researches made in this department of biological and medical science have been of immense benefit to the human race; and that, in general, our knowledge of physiology, of toxicology and of pathology, forming the basis of scientific medicine, has been largely obtained by experiments upon living animals, and could have been obtained in no other way.

Resolved, That physicians and others who are engaged in research work having for its object the extension of human knowledge and the prevention and cure of disease are the best judges of the character of the experiments required and of the necessity of using anesthetics, and that in our judgment they may be trusted to conduct such experiments in a humane manner, and to give anesthetics when required to prevent pain. To subject them to penalties and to espionage, as is proposed by the bill under consideration, would, we think, be an unjust and unmerited reflection upon a class of men who are entitled to our highest consideration.

Dr. C. A. Doremus read a 'Note on Presence of Oil in Boiler Scale.'

Mr. J. A. Matthews described 'A New Method of Preparing Phthalimid.'

The chair announced this as the last meeting of the season, and stated that the fall and winter meetings would probably be held in the same rooms.

DURAND WOODMAN,
Secretary.

PROCEEDINGS OF THE TORREY BOTANICAL CLUB, MAY 27, 1896.

THE last regular meeting of the season was held in Hamilton Hall, Dr. Schneider occupying the chair. One new member was elected.

Dr. John K. Small read his announced paper: 'Notes on the Flora of Yadkin Valley, N. C.' He spoke of the character of the Yadkin River and the geology between Salisbury, N. C., and the district where the Yadkin becomes the great Pedee. He discussed the great similarity of Dunn's Mountain, N. C., and Stone Mountain, Ga., the fact strongly emphasized by the local species common to both localities. He then gave a running account of the general floral features of the Yadkin Valley and summarized the phenomena as follows:

I. Several new species have lately been discovered in that region, viz: *Acer leucoderma. Solidago Yadkinensis* and *Quercus Phellos* $\times$=*Q. digitata.*

II. Several typical members of the prairie or *plains* flora are perfectly at home there, as *Scutellaria campestris* and *Solidago radula.*

III. Plants thought to be confined to the granite outcrop of Georgia are common, viz: *Arenaria brevifolia* and *Diamorpha pusilla.*

IV. Alleghenian or subalpine species as *Waldsteinia fragarioides* and *Anemone trifolia* occur there.

V. One species, *Lotus Helleri*, is *endemic.*

VI. A typically northern and very local species *Solidago Purshii* reaches a greater development, and is more abundant than elsewhere.

VII. A normally tropical species *Portulaca pilosa* abounds in certain places.

VIII. Generally local plants are represented by *Clematis ochroleuca, Verbena riparia, Oxalis recurva* and *Aster ptarmicoides Georgianus.*

Remarks were made and a discussion followed on the growth of plants in regions which for long periods at a time are devoid of rain.

A number of cut flowers of *Arethusa bulbosa* were presented to the members by Miss Rachel Farrington, of Lakewood, N. J.

W. A. Bastedo,
Secretary pro tem.

KANSAS UNIVERSITY SCIENCE CLUB.

At the twelfth annual meeting, held at Snow Hall on June 4th, the following program was presented:

On *Hesperornis*, S. W. Williston; The Groups of Motive in the Plane, H. B. Newson; The Motion of a Semispherical Shell on a Horizontal Plane, A. Emch; New Methods of Demonstration in Botany, M. A. Barber; Theory of the Satellites of the Earth and Mars, E. Miller; Stratigraphy of the Fort Benton, W. N. Logan; Construction and Use of an Interference Refractometer, M. E. Rice; A New Species of Sabre-toothed Cat, E. S. Riggs; On Double Sulfates, H. P. Cady; Further Investigations regarding the Constituents of the Dandelion Root, L. E. Sayre; Analysis of a Gypsum from Marshall County, L. Page; Analysis of House Paints, W. R. Mason and E. L. McCoy; Certain Principles in the Construction of Disruptive Discharge Coils, A. St.C. Dunstan; Some Conditions Governing the Deposition of the Lead and Zinc Ores in Southeast Kansas, E. Haworth; Variable Constitution of a Fresh Egg, James Lear and L. E. Sayre; Comparative Chaetotaxy of Diptera, H. W. Menke; Analysis of 'Natural Plaster' from Reno County, L. Page.

NEW BOOKS.

Thirteenth Annual Report of the Bureau of Ethnology. J. W. Powell. 1891–2. Washington, Government Printing Office. 1896. Pp. lix+462.

Year Book of the United States Department of Agriculture, 1895. Washington, Government Printing Office. 1896. Pp. 656.

Report of Work of Agricultural Experiment Stations of the University of California for the Year 1894–95. Sacramento. 1896. Pp. xii+481.

Lehrbuch der vergleichenden Mikroskopischen Anatomie der Wirbeltiere. Albert Oppel. Erster Teil. Der Magen. Jena, Gustav Fischer. 1896. Pp. viii+543.

Anleitung zur Microchemischen Analyse. H. Behrens. Heft III. Hamburg and Leipzig, Leopold Voss. 1896. Pp. vii+135.

Official Year Book of the Scientific and Learned Societies of Great Britain and Ireland. London, Charles Griffin & Co., Lt'd. 1896. Pp. iv+262. 7s. 2d.

Long Life. Volume III. C. A. Stephens. The Laboratory, Norway Lake, Maine. 1896. Pp. 218.

The Oswego Normal Method of Teaching Geography. Amos W. Farnham. Syracuse, N. Y., C. W. Bardeen. 1896. Pp, 127. 50 cts.